

CLAIMS

- 1 1. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and the consumable items
3 each having an information retaining mechanism, comprising the steps of:
4 a) for each consumable item distributed within a region, configuring the
5 information retaining mechanism in a manner which uniquely identifies the
6 region; then
7 b) installing in the device a consumable item having an information retaining
8 mechanism configured for the region; and then
9 c) transferring the region identification information from the consumable item
10 information retaining mechanism to the memory associated with the device
11 and storing the information therein.
- 1 2. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 1, wherein the memory associated with the device
3 is an electronic memory within the device.
- 1 3. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 2, wherein the information retaining mechanism
3 of each of the consumable items is an electronic memory, the step of configuring
4 the information retaining mechanism in a manner which uniquely identifies the
5 region comprises writing the region identification information to the electronic
6 memory, and the step of transferring region identification information from the
7 consumable item to the electronic memory within the device comprises
8 electronically reading the information from the electronic memory of the
9 consumable item and electronically writing the information to the electronic
10 memory within the device.

1 4. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 3, wherein the device further has an associated
3 wireless communications link in data communication with the associated memory
4 and the consumable items each further comprise a wireless communications link
5 in data communication with the electronic memory, and electronically reading the
6 information from the electronic memory of the consumable is accomplished over
7 the wireless links.

1 5. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 4, wherein the information retaining mechanism
3 of each of the consumable items is an electronic memory, the step of configuring
4 the information retaining mechanism in a manner which uniquely identifies the
5 region comprises writing the region identification information to the electronic
6 memory, and the step of transferring region identification information from the
7 consumable item to the electronic memory within the device includes
8 electronically reading the information from the electronic memory of the
9 consumable item.

1 6. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 3, wherein electronically reading the information
3 from the electronic memory of the consumable is accomplished over a wireless
4 link.

1 7. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 1, wherein the device further comprises a printer
3 and the consumable items further comprise printer consumables.

1 8. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 7, wherein the printer is an ink jet printer and the
3 printer consumables are ink jet cartridges.

1 9. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and an associated wireless
3 communications link in data communication with the associated memory, and the
4 consumable items each having an electronic memory component and a wireless
5 communications link in data communication with the electronic memory
6 component, comprising the steps of:
7 a) for each consumable item distributed within a region, configuring the
8 electronic memory component in a manner which uniquely identifies the
9 region; then
10 b) installing in the device a consumable item having a memory component
11 configured for the region; and then
12 d) transferring the region identification information from the consumable item
13 electronic memory component over the wireless communication links to the
14 memory associated with the device and storing the information therein.

1 10. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 9, wherein the device further comprises a printer
3 and the consumable items further comprise printer consumables.

- 1 11. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 10, wherein the printer is an ink jet printer and the
3 printer consumables are ink jet cartridges.
- 1 12. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and the consumable items
3 each having an information retaining mechanism, comprising the steps of:
4 a) for each consumable item distributed within a region, configuring the
5 information retaining mechanism in a manner which uniquely identifies the
6 region; then
7 b) installing in the device a consumable item having an information retaining
8 mechanism configured for the region; then
9 c) transferring the region identification information from the consumable item
10 information retaining mechanism to the memory associated with the device
11 and storing the information therein; and
12 for subsequent consumable item installed in the device,
13 d) testing the information retaining mechanism of the subsequently installed
14 consumable item to determine the region identification information contained
15 therein; then
16 e) comparing the region identification of the subsequently installed consumable
17 with the region identification stored in memory, and then
18 f) if the region identifications do not match, declining the subsequently
19 installed consumable.
- 1 13. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 12, wherein the memory associated with the
3 device is an electronic memory within the device.

1 14. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 13, wherein the information retaining mechanism
3 of each of the consumable items is an electronic memory, the step of configuring
4 the information retaining mechanism in a manner which uniquely identifies the
5 region comprises writing the region identification information to the electronic
6 memory, and the step of transferring region identification information from the
7 consumable item to the electronic memory within the device comprises
8 electronically reading the information from the electronic memory of the
9 consumable item and electronically writing the information to the electronic
10 memory within the device.

1 15. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 14, wherein the device further has an associated
3 wireless communications link in data communication with the associated memory
4 and the consumable items each further comprise a wireless communications link
5 in data communication with the electronic memory, and electronically reading the
6 information from the electronic memory of the consumable is accomplished over
7 the wireless links.

1 16. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 12, wherein the information retaining mechanism
3 of each of the consumable items is an electronic memory, the step of configuring
4 the information retaining mechanism in a manner which uniquely identifies the
5 region comprises writing the region identification information to the electronic
6 memory, and the step of transferring region identification information from the
7 consumable item to the electronic memory within the device includes
8 electronically reading the information from the electronic memory of the
9 consumable item.

1 17. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 16, wherein the device further has an associated
3 wireless communications link in data communication with the associated memory
4 and the consumable items each further comprise a wireless communications link
5 in data communication with the electronic memory, and electronically reading the
6 information from the electronic memory of the consumable is accomplished over
7 the wireless links.

1 18. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 12, wherein the device has an associated user
3 interface allowing messages to be displayed to a user and also allowing responses
4 to be input by the user, and the step of declining the consumable comprises
5 notifying the device user of an incompatibility and requiring a specific response
6 to be input by the user.

1 19. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and an associated user
3 interface for receiving user input and displaying output, and the consumable items
4 each having an information retaining mechanism, comprising the steps of:
5 a) for each consumable item distributed within a region, configuring the
6 information retaining mechanism in a manner which uniquely identifies the
7 region; then
8 b) installing in the device a consumable item having an information retaining
9 mechanism configured for the region; and then
10 c) transferring the region identification information from the consumable item
11 information retaining mechanism to the memory associated with the device
12 and storing the information therein.

1 20. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 19, wherein the associated user interface for
3 receiving user input and displaying output is operable to receive input and display
4 out in a plurality of natural languages, and wherein the language used for input
5 and output is selected based upon the region identification information stored in
6 memory.

1 21. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and the consumable items
3 each having an information retaining mechanism, comprising the steps of:
4 a) providing for distribution within the region consumable items each having
5 the information retaining mechanism configured in a manner which uniquely
6 identifies the region; then
7 b) installing in the device a consumable item having an information retaining
8 mechanism configured for the region; and then
9 e) transferring the region identification information from the consumable item
10 information retaining mechanism to the memory associated with the device
11 and storing the information therein.

1 22. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 21, wherein the memory associated with the
3 device is an electronic memory within the device.

23. The method of regionalizing a manufactured device and consumable items utilized by the device of Claim 22, wherein the information retaining mechanism of each of the consumable items is an electronic memory, the step of configuring the information retaining mechanism in a manner which uniquely identifies the region comprises writing the region identification information to the electronic memory, and the step of transferring region identification information from the consumable item to the electronic memory within the device comprises electronically reading the information from the electronic memory of the consumable item and electronically writing the information to the electronic memory within the device.

24. The method of regionalizing a manufactured device and consumable items utilized by the device of Claim 23, wherein the device further has an associated wireless communications link in data communication with the associated memory and the consumable items each further comprise a wireless communications link in data communication with the electronic memory, and electronically reading the information from the electronic memory of the consumable is accomplished over the wireless links.

25. The method of regionalizing a manufactured device and consumable items utilized by the device of Claim 24, wherein the information retaining mechanism of each of the consumable items is an electronic memory, the step of configuring the information retaining mechanism in a manner which uniquely identifies the region comprises writing the region identification information to the electronic memory, and the step of transferring region identification information from the consumable item to the electronic memory within the device includes electronically reading the information from the electronic memory of the consumable item.

1 26. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 23, wherein electronically reading the information
3 from the electronic memory of the consumable is accomplished over a wireless
4 link.

1 27. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 21, wherein the device further comprises a printer
3 and the consumable items further comprise printer consumables.

1 28. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 27, wherein the printer is an ink jet printer and the
3 printer consumables are ink jet cartridges.

1 29. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and an associated wireless
3 communications link in data communication with the associated memory, and the
4 consumable items each having an electronic memory component and a wireless
5 communications link in data communication with the electronic memory
6 component, comprising the steps of:
7 a) providing for distribution within the region consumable items each having
8 the electronic memory component configured in a manner which uniquely
9 identifies the region; then
10 b) installing in the device a consumable item having a memory component
11 configured for the region; and then
12 f) transferring the region identification information from the consumable item
13 electronic memory component over the wireless communication links to the
14 memory associated with the device and storing the information therein.

- 1 30. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 29, wherein the device further comprises a printer
3 and the consumable items further comprise printer consumables.
- 1 31. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 30, wherein the printer is an ink jet printer and the
3 printer consumables are ink jet cartridges.
- 1 32. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and the consumable items
3 each having an information retaining mechanism, comprising the steps of:
4 a) providing for distribution within the region consumable items each having
5 the information retaining mechanism configured in a manner which uniquely
6 identifies the region; then
7 b) installing in the device a consumable item having an information retaining
8 mechanism configured for the region; then
9 c) transferring the region identification information from the consumable item
10 information retaining mechanism to the memory associated with the device
11 and storing the information therein; and
12 for subsequent consumable item installed in the device,
13 d) testing the information retaining mechanism of the subsequently installed
14 consumable item to determine the region identification information contained
15 therein; then
16 e) comparing the region identification of the subsequently installed consumable
17 with the region identification stored in memory, and then
18 f) if the region identifications do not match, declining the subsequently
19 installed consumable.

1 33. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 32, wherein the memory associated with the
3 device is an electronic memory within the device.

1 34. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 33, wherein the information retaining mechanism
3 of each of the consumable items is an electronic memory, the step of configuring
4 the information retaining mechanism in a manner which uniquely identifies the
5 region comprises writing the region identification information to the electronic
6 memory, and the step of transferring region identification information from the
7 consumable item to the electronic memory within the device comprises
8 electronically reading the information from the electronic memory of the
9 consumable item and electronically writing the information to the electronic
10 memory within the device.

1 35. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 34, wherein the device further has an associated
3 wireless communications link in data communication with the associated memory
4 and the consumable items each further comprise a wireless communications link
5 in data communication with the electronic memory, and electronically reading the
6 information from the electronic memory of the consumable is accomplished over
7 the wireless links.

1 36. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 32, wherein the information retaining mechanism
3 of each of the consumable items is an electronic memory, the step of configuring
4 the information retaining mechanism in a manner which uniquely identifies the
5 region comprises writing the region identification information to the electronic
6 memory, and the step of transferring region identification information from the
7 consumable item to the electronic memory within the device includes
8 electronically reading the information from the electronic memory of the
9 consumable item.

1 37. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 36, wherein the device further has an associated
3 wireless communications link in data communication with the associated memory
4 and the consumable items each further comprise a wireless communications link
5 in data communication with the electronic memory, and electronically reading the
6 information from the electronic memory of the consumable is accomplished over
7 the wireless links.

1 38. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 32, wherein the device has an associated user
3 interface allowing messages to be displayed to a user and also allowing responses
4 to be input by the user, and the step of declining the consumable comprises
5 notifying the device user of an incompatibility and requiring a specific response
6 to be input by the user.

1 39. A method of regionalizing a manufactured device and consumable items utilized
2 by the device, the device having an associated memory and an associated user
3 interface for receiving user input and displaying output, and the consumable items
4 each having an information retaining mechanism, comprising the steps of:

- 5 a) providing for distribution within the region consumable items each having
6 the information retaining mechanism configured in a manner which uniquely
7 identifies the region; then
8 b) installing in the device a consumable item having an information retaining
9 mechanism configured for the region; and then
10 c) transferring the region identification information from the consumable item
11 information retaining mechanism to the memory associated with the device
12 and storing the information therein.

1 40. The method of regionalizing a manufactured device and consumable items
2 utilized by the device of Claim 39, wherein the associated user interface for
3 receiving user input and displaying output is operable to receive input and display
4 out in a plurality of natural languages, and wherein the language used for input
5 and output is selected based upon the region identification information stored in
6 memory.

- 1 41. A replaceable consumable component for use with a manufactured device having
2 a stored regional designation and operable to accept only consumable components
3 with the same regional designation, comprising:
4 a) a radio frequency link for receiving information indicative of a particular
5 regional designation; and
6 b) an electrical storage device for storing information indicative of the particular
7 regional designation,
8 wherein the information is retrievable from the electrical storage device over the
9 radio frequency link for indicating regional designation of the consumable
10 component.
- 1 42. The replaceable consumable component of Claim 41 wherein the consumable
2 component is for use with printing system, and the replaceable consumable item
3 includes a reservoir for containing marking material.
- 1 43. The replaceable consumable component of Claim 42 wherein the replaceable
2 consumable component is an ink jet print cartridge.
- 1 44. The replaceable consumable component of Claim 42 wherein the replaceable
2 consumable component is a toner cartridge for printing using an
3 electrophotographic printing process.
- 1 45. The replaceable consumable component of Claim 41 wherein the radio frequency
2 linking device receives information in a serial fashion for storage in the electrical
3 storage device.

1 46. The replaceable consumable component of Claim 41 wherein the electrical
2 storage device is a semiconductor memory device.

1 47. A method for storing information indicative of a particular regional designation
2 of a replaceable component of a plurality of regional designations of similar
3 replaceable components, the method comprising:

- 4 a) providing a radio frequency signal having information contained therein
5 indicative of the particular regional designation of the replaceable
6 component; and
7 b) storing the information indicative of the particular regional designation of the
8 replaceable component in a storage device associated with that item in
9 response to receiving the radio frequency signal.

1 48. The method for storing information indicative of a particular regional designation
2 of Claim 47 wherein providing a radio frequency signal having information
3 contained therein is accomplished by providing a radio frequency signal that is
4 modulated to encode information therein.

1 49. The method for storing information indicative of a particular regional designation
2 of Claim 47 wherein storing the information indicative of the particular regional
3 designation includes receiving information in a serial fashion for storage in the
4 storage device.

1 50. The method for storing information indicative of a particular regional designation
2 of Claim 47 wherein the storage device is a semiconductor memory.

1 51. The method for storing information indicative of a particular regional
2 designation of Claim 47 further including retrieving the information indicative
3 of the particular regional designation for transmission to a regionalized
4 utilizing the replaceable component.